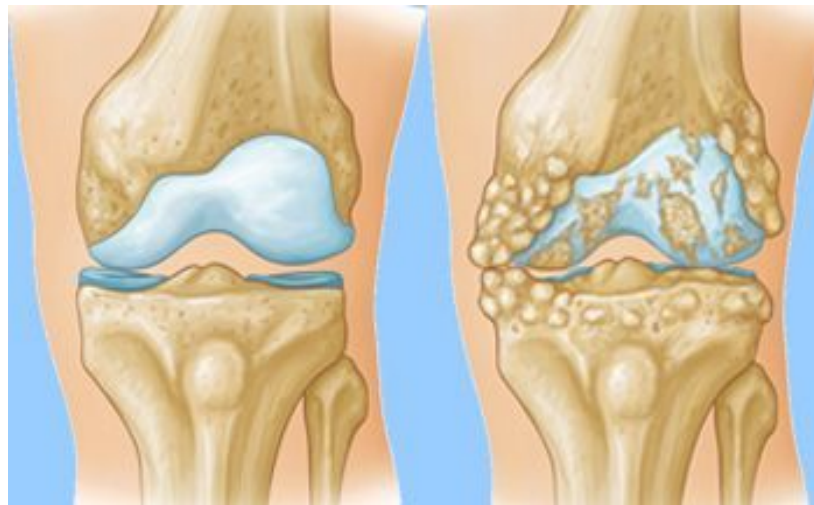

Benefits of Resistance Training for Arthritis

Olivia Stowell, R. Kin
Curans Heart Centre

What is Arthritis?

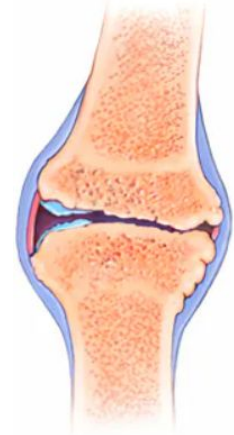
Arthritis

- Arthritis is the swelling and tenderness of the joints. Some people have them in many different joints or some stay in one area.
- **Symptoms include:**
 - Joint stiffness
 - Joint pain
 - Worsens with age
 - Swelling and tenderness

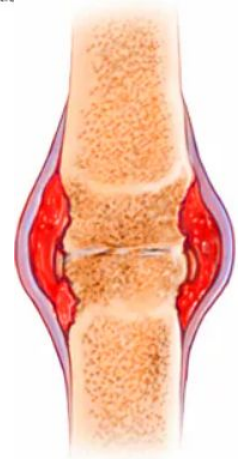


Types of Arthritis

- The most common types are osteoarthritis and rheumatoid arthritis.
- **Osteoarthritis** involves the wear and tear of the joints to the point where there is no cushion on the ends of the bone resulting in grinding and increased pain that restricts movement.
- **Rheumatoid arthritis** is the body's immune systems way of attacking the joint capsule enough that it becomes swollen and painful.



Osteoarthritis



Rheumatoid arthritis

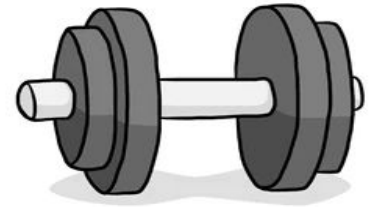
Causes of Arthritis

- Work in a field or played sports that puts repeated stress in your joints
- Have an autoimmune disease or viral infection that directly attacks the joints
- Family history
- Aging
- Excess weight
- Lifestyle: lack of exercise, smoking
- Sex: more common in women
- Previous injury



Tests and Treatments of Arthritis

- You can often determine if you have a type of arthritis by imaging such as x-rays, CT scans, MRIs, and ultrasounds
- Sometimes with rheumatoid, a blood test needs to be done and a thorough family history should take place
- **Treatment:**
 - Anti-inflammatory drugs
 - Creams and ointments
 - Steroids
 - Surgery
 - Resistance training



Resistance Training

Health Benefits of Resistance Training

- Resistance training increases muscle and joint strength.
- Includes using weights, resistance bands, and even your own body weight.
- To see benefits, a beginner only needs to resistance train 2-times per week.
- It is also important to add variations to your resistance workouts to see benefits and avoid a plateau in your body and your mind.

Examples of Resistance Training

- **Free Weights:** dumbbells, barbells, kettlebells, and soup cans
- Medicine Balls or Sand Bags
- Weight Machines and Resistance Bands
- **Body Weight:** squats, push-ups, chin-ups
- Full body, upper/lower body, push/pull



Arthritis and the Benefits of Resistance Training

Resistance Helps with Arthritis

- **Weight lifting eases joint pain and stiffness by:**
 - Reducing inflammation
 - Increased flexibility
- **Weight lifting boosts bone strength**
 - By gently stressing the bones strength training can increase bone density and reduce the risk of osteoarthritis
- **Weight training helps maintain weight**
 - Lessens constant excess weight on the joints
- **Weight training improves balance**



Precautions for Resistance Training with Arthritis

- Consider equipment you have, want, or need
- During a flare-up strenuous exercise is contraindicated, and 2-3 days rest is required followed by low-impact activity
- Start slowly for injury prevention
- Complete a warm-up and cool-down
- Stay hydrated
- Stop if anything hurts



Tips for Resistance Training with Arthritis

- Schedule your workouts during times of the day when you are experiencing the least amount of pain, stiffness, and inflammation.
- Exercise within a comfortable range of motion and if you experience significant pain during a movement, stop doing it!
- Choose the right weight. Your own body weight, a soup can, or a light dumbbell (1-3 lbs) are the safest starting points.

Advice from Dr. Lai

Many patients report “my bones ache, my joints ache, my muscles ache” - build up your muscle strength to support your aching bones and joints.



Workout Session

30 Minutes



Warm-Up

30 seconds each exercise

- Marching on the spot
- Shoulder rolls
- Side steps
- Arm circles
- Side bends with arms
- Butt kicks
- Ankle circles
- Torso twists
- Neck rolls
- Front leg swings

Guided Strength Exercises



Remember

- Always maintain a proper body position
- Breathe during each exercise
 - Holding your breath increases your internal pressure, thus increasing your blood pressure
- Not sure if you are doing it correct? Ask!

Session Breakdown

Full Body Circuit Training

- How it works:
 - 3 rounds
 - 8 exercises
 - 8 repetitions of each exercise
 - Rest period after each round

Perform 8 repetitions each exercise

Start



End



#1

Start



End



#2

Start



End



#3

Start



End



#4

Perform 8 repetitions each exercise

Start



End



#5

Start

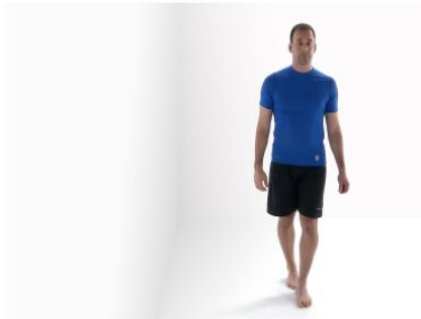


End



#6

Start



End



#7

Start



End



#8

Rest Break

Perform 8 repetitions each exercise

Start



End



#1

Start



End



#2

Start



End



#3

Start



End



#4

Perform 8 repetitions each exercise

Start



End



#5

Start



End



#6

Start



End



#7

Start



End



#8

Rest Break

Perform 8 repetitions each exercise

Start



End



#1

Start



End



#2

Start



End



#3

Start



End



#4

Perform 8 repetitions each exercise

Start



End



#5

Start

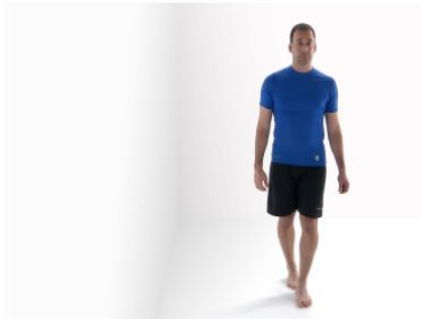


End



#6

Start



End



#7

Start



End



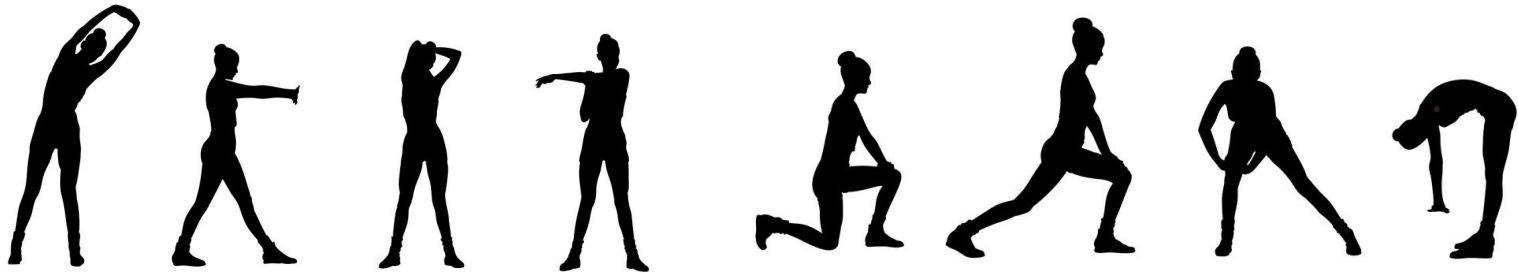
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Cool-Down

45 seconds each stretch

In chair or standing:

- Forward hamstring stretch
- Head tilt
- Arm across chest
- Figure 4 glute stretch
- Wrist flexor stretch
- Knee to chest
- Overhead tricep stretch
- 3 Deep breaths



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